

Work Order ID 82990

Thursday, April 12, 2012 11:16:07 AM

82990

Page 1

Item ID: D350-689-023 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Energy Attenuating Floor Provisions
 Start Date: 4/12/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 4/24/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: *[Signature]* Date: 12-04-12 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI 9588	A								
IIN-D350-689	B								
109	DOCUMENT CONTROL	0.00							
100									
DC	Memo	0.00							
Document Control	Photocopy bluefile and create labels per PPP D350-689-023 CHG004								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

[Signature] for MJS 12-4-24

[Signature]

[Signature] 12/4/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D350-689-023 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Energy Attenuating Floor Provisions
 Start Date: 4/12/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 4/24/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC4- 100% Inspect kits for completeness	0.00							
120		0.00							
QC	Memo								
Quality Control									
130	Packaging	0.00							
130		0.00							
Packaging	Memo								
Packaging	Identify and pack for shipping as per PPP D350-689-023								
	Location: _____								
	PPP Rev: <u>C</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140		0.00							
QC	Memo								
Quality Control									

MF
12-04-24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, April 12, 2012 11:16:11 AM

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Work Order ID: 82990

82990

Parent Item: D350-689-023

D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 4/12/2012

Required Date: 4/24/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-12-23 new issue DD verified by:EC
 revise route seq DD 10.02.12 vrified byJLM
 11.09.28 verified by:JLM
 CHG004 (ecn12-501) DD VERF:EC
 IPP Rev:B
 IPP Rev:C chg003 DD
 IPP Rev:D 12.01.12 now @

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4575-1 S *D4575-1* Beam		Manufactured	No			110	Each	5.0000	1	1			sf suc
--------------------------------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--------

Location	Loc Qty	Loc Code
ST135F	5	
79965	5	

D4575-3 S *D4575-3* Doubler		Manufactured	No			110	Each	7.0000	1	1			sf suc
-----------------------------------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--------

Location	Loc Qty	Loc Code
ST197	7	
79969	7	

D3027-7 S *D3027-7* Clip		Manufactured	No			110	Each	25.0000	4	4			18/4/23
--------------------------------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	---------

Location	Loc Qty	Loc Code
ST023	25	
70497	3	
70582	22	

3	suc
1	suc

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Work Order ID: 82990

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Parent Item: D350-689-023

D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 4/12/2012

Required Date: 4/24/2012

Start Qty: 1.00

Required Qty: 1.00

D3811-041 Manufactured No

110 Each

4.0000

1 1

**

D3811-041

Seat Track Assembly

Location

Loc Qty

Loc Code

ST262

4

71009

1

13447

3

MS21042L3

Purchased No

110

Each

2,995.000

9

9

**

MS21042L3

Nut

Location

Loc Qty

Loc Code

ST300

2995

117441

16

117885

32

118451

5

118927

3

119017

1773

119075

166

121349

1000

MS24694-S50

Purchased No

110

Each

176.0000

9 9

**

MS24694-S50

Screw

Location

Loc Qty

Loc Code

ST289

76

116900

1

117739

3

118078

1

119124

71

ST289A

100

121166

100

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Thursday, April 12, 2012 11:16:11 AM

Work Order ID: 82990

82990

Parent Item: D350-689-023

D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 4/12/2012

Required Date: 4/24/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

110

Each

2,431.000

9

9

NAS1149D0363.I

Washer

**

12/4/230

Location

Loc Qty

Loc Code

ST298

2431

117601

61

118077

1

118612

18

119537

33

120142

76

120308

46

120644

272

121243

1924

OK SUC

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

4. WEIGHT AND BALANCE

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-011 Dual High Back Seat Installation, Fwd Position	27.6 lb 12.5 kg	-18.2 in -0.46 m	-502 in-lb -5.8 m-kg	60.7 in 1.54 m	1675 in-lb 19.3 m-kg
D350-689-013 Floor Provisions Kit, Fwd Position	2.0 lb 0.9 kg	-18.2 in -0.46 m	-36 in-lb -0.4 m-kg	60.7 in 1.54 m	121 in-lb 1.4 m-kg
D350-689-011 Dual High Back Seat Installation, Aft Position	28.1 lb 12.7 kg	-18.2 in -0.46 m	-511 in-lb -5.8 m-kg	63.7 in 1.62 m	1790 in-lb 20.57 m-kg
D350-689-013 Floor Provisions Kit, Aft Position	3.1 lb 1.4 kg	-18.2 in -0.46 m	-56 in-lb -0.6 m-kg	62.2 in 1.58 m	193 in-lb 2.2 m-kg
D350-689-015 Seat Modification Kit	1.0 lb 0.5 kg	-17.2 in -0.44 m	-17 in-lb -0.22 m-kg	60.7 1.54 m	61 in-lb 0.77 m-kg
D350-689-017 Shoulder Harness, Fwd Position	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-kg	60.7 in 1.54 m	267 in-lb 3.08 m-kg
D350-689-017 Shoulder Harness, Aft Position	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-kg	64.7 in 1.64 m	285 in-lb 3.28 m-kg
D350-689-019 Control Guard, Fwd Position	0.5 lb 0.23 kg	-9.0 in -0.23 m	-4.5 in-lb -0.05 m-kg	60.7 in 1.54 m	30 in-lb 0.35 m-kg
D350-689-019 Control Guard, Aft Position	0.5 lb 0.23 kg	-9.0 in -0.23 m	-4.5 in-lb -0.05 m-kg	64.7 in 1.64 m	32 in-lb 0.38 m-kg
D350-689-021 Dual High Seat Back Installation, LH Fwd Position	29.2 lb 13.2 kg	-18.2 in -0.46 m	-531 in-lb -6.1 m-kg	60.7 in 1.54 m	1772 in-lb 20.3 m-kg
D350-689-021 Dual High Seat Back Installation, LH Aft Position	29.2 lb 13.2 kg	-18.2 in -0.46 m	-531 in-lb -6.1 m-kg	64.7 in 1.64 m	1889 in-lb 21.6 m-kg
D350-689-023 Energy Attenuating Floor Provisions Kit	2.5 lb 1.1 kg	-18.2 in -0.46 m	-46 in-lb -0.5 m-kg	62.2 in 1.58 m	156 in-lb 1.7 m-kg

5. PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
							2	2	D3016-041	SEAT FRAME ASSEMBLY
							1	1	D3017-041	BACK FRAME ASSEMBLY
1					1				D3018-1	SEAT CUSHION
1					1				D3019-1	BACK CUSHION
							1	1	D3021-041	TUBE ASSEMBLY
							1	1	D3022-1	SEAT PAN
							1	1	D3023-1	BACK PANEL
							3	3	D3024-1	SPACER
	1								D3025-1	BEAM

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Revision: **B**

Date: 11.07.22

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
	1					1			D3026-1	CHANNEL
	1								D3027-1	CLIP
	1								D3027-3	CLIP
	1								D3027-5	CLIP
	4					4			D3027-7	CLIP
							4		D3028-1	STUD
		2					2		D3029-1	SPRING
		2					2		D3030-1	LOCK
							2	2	D3031-1	LOOP
	1								D3032-1	SPACER
	2	1							D3033-1	SEAT TRACK
		4							D3059-1	STUD
		4							D3060-1	BUSHING
		4							D3061-1	RADIUS BLOCK
				1					D3084-3	STRUT
	1								D3234-1	DOUBLER
	1					1			D3234-3	DOUBLER
	2								D3234-5	SPACER
								2	D3808-041	SEAT RAIL ASSEMBLY
								4	D3809-1	SLIDING BLOCK
						1			D3811-041	SEAT TRACK ASSEMBLY
			2						D4071-041	SHOULDER HARDNESS ASSY
							3	3	AN3-12A	BOLT
				1					AN4-12A	BOLT
				1					AN4-20A	BOLT
			2						AN5-4A	BOLT
							40	40	MS20600AD4W2	RIVET
							6	6	MS20600AD4W3	RIVET
						9	17	17	MS21042L3	NUT (OR MS21042-3)
				2			6	6	MS21042L4	NUT (OR MS21042-4)
		4	2						MS21042L5	NUT (OR MS21042-5)
	12	4							MS21059L3	NUTPLATE
							4	4	MS24693-S272	SCREW
	2	1							MS24693-S273	SCREW
								8	MS24694-S3	SCREW
						9			MS24694-S50	SCREW
								4	MS24694-S148	SCREW
	6	3							MS27039-1-10	SCREW
							4	4	MS27039-1-17	SCREW
							6	6	MS27039-1-19	SCREW
							6	6	MS27039-4-21	SCREW
	6	3					17	17	NAS1149D0332J	WASHER (OR AN960JD10L)
						9			NAS1149D0363J	WASHER (OR AN960JD10)
				8					NAS1149D0416J	WASHER (OR AN960JD416L)
							6	6	NAS1149D0432J	WASHER (OR AN960JD416)
			4						NAS1149D0516J	WASHER (OR AN960JD516L)
		4							NAS1149D0563J	WASHER (OR AN960JD516)
				2					NAS43DD4-46N	SPACER

4.0 PARTS LIST CHANGE

The parts list of D350-689-021/-023 at CHG 005/004 or later is amended as follows:

REFERENCE ONLY

5. PARTS LIST (IIN-D350-689)

25.10 PARTS LIST (ICA-D350-689)

IS:

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
	1								D3026-1	CHANNEL (REMOVED FROM -023)
	1								D3234-3	DOUBLER (REMOVED FROM -023)
						1			D4575-1	BEAM (REPLACES D3026-1 IN -023)
						1			D4575-3	DOUBLER (NEW IN -023)

WAS:






Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
	1					<1			D3026-1	CHANNEL
	1					1			D3234-3	DOUBLER

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 11.12.23
CERT. NO.: SH02-33
ISSUE NO.: 1

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9588	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		INSTALLATION CHANGE NTS	
DATE 11.12.22		<small>COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	